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EXAMINER	
CAO, DIEM K	

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2194	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,596	SATHER ET AL.	
	Examiner	Art Unit	
	DIEM K. CAO	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-10,27,29-32,34 and 41-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-10,27,29-32,34 and 41-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-4, 6-10, 27, 29-32, 34 and 41-56 are pending. Applicant has cancelled claims 5 and 28, amended claims 1, 27, 29-30, 32, 41, 44-46, 49, 51 and 54, and added new claims 55 and 56.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2) further in view of Ruberg (US 6,895,588 B1).

As to claim 1, Nishio teaches a network device interaction system in a computing device adapted to connect to a network (abstract), the system comprising:

a registry (inherent from a client PC; see Fig. 1); and

a processor configured to execute a plurality of software components (CPU … modules 1-8; col. 4, lines 33-46), the component comprising:

an application component (application) adapted to utilize a network device (when the user selects and designates a desired printer name on the list; col. 8, lines 7-8 and

when printing a document created by an application running on the client, user wants to print data using a printer ... to the network; col. 5, lines 24-25, lines 39-42);

a monitor component that detects the connected network devices on the network (col.5, lines 50-61), whereby the computing device can determine when the network device is accessible to the application component (col. 8, lines 4-27); and

a configuration component (the automatic driver down-loader/configurator 100 in the application 1 is activated; col. 5, lines 47-49) that automatically configures the network device for operation with the application component in response to arrival of the network device being detected by the monitor component (When the user select … installs the drivers; col. 8, lines 7-18) by:

receiving metadata for identifying the network device, the metadata comprising a hardware identifier for the network device (When the user selects … converts the device ID; col. 8, lines 7-11 and Fig. 6);

determining configuration information using the hardware identifier for the network device (device driver, printer IP address, device number; col. 8, lines 11-21. Since the response sent back include multiple printers, the device ID must be used to extract and obtain the correct configuration information for the printer that is selected from the user from the list of multiple printers), the configuration information indicating a configuration of the network device (col. 7, lines 16-29), the configuration information comprising one or more registry keys (IPAddress, Driver-Version, DriverURL, PrinterLocation; col. 7, lines 16-29); and

configuring the system with the configuration information in association with the hardware identifier (col. 9, lines 30-40 and lines 59-66);

an association component for forming an association between the computing device and one or more other network devices based on user input (col. 8, lines 7-27); and

a display component that displays to a user of the computing device an interface indicating associated network devices, the interface selectively including a representation of the network device in a format indicating the network device is available based on an output of the monitoring component (col. 8, lines 4-6).

Nishio does not explicitly teach the monitor component that detects departure of the network device on the network, and the configuring comprising setting the registry with the one or more registry keys from the configuration information.

However, Howard teaches wherein configuration of the system further comprises setting one or more registry keys (The operating system … in the registry; col. 7, lines 13-24, col. 8, lines 5-26). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to apply the teaching of Howard to the system of Nishio because Howard teaches in details how the system installs a device driver to use with external device.

Ruberg teaches the monitor component that detects arrival and departure of the network devices on the network (col. 5, lines 26-32). It would have been obvious to one of ordinary skill in the art to apply the teaching of Ruberg to the system of Nishio because Ruberg teaches a method to manage the devices in the network that can present to the user all the available network devices that can be used.

As to claim 2, Nishio teaches wherein the configuration information further comprises a device driver associated with the network device (Driver URL; col. 7, lines 28-29), and configuration the system comprises loading a driver associated with the device (The application 1 searches a driver database … the application 1 installs the driver; col. 8, lines 11-18).

As to claim 3, Nishio does not teach wherein configuring the system comprises setting the registry with the one or more registry keys, the one or more registry keys indicating a user preference.

However, Howard teaches wherein configuring the system comprises setting the registry with the one or more registry keys (The operating system … in the registry; col. 7, lines 13-24, col. 8, lines 5-26), the one or more registry keys indicating a user preference (col. 7, lines 15-35).

See rejection of claim 1 for reason to apply the teaching of Howard to the system of Nishio.

As to claim 4, Nishio teaches wherein the device driver is loaded from a local data store (a driver database managed by the client OS; col. 8, lines 11-15) or is downloaded over the Internet (Driver URL … a storage device of a server on the network; col. 7, lines 28-35).

As to claim 6, Nishio teaches wherein the device driver is received from the network device (A configurator 7 executes the installation of a driver obtained from the printer; col. 4, lines 3-4 and The driver URL can be a URL to the printer; col. 11, lines 12-19).

As to claim 7, Nishio teaches wherein the device driver is retrieved from a computer readable medium (a driver database managed by the client OS; col. 8, lines 11-15).

As to claim 8, Nishio teaches wherein the device driver is retrieved from a computer over a local area network (Driver URL … a storage device of a server on the network; col. 7, lines 28-35).

4. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2) and Ruberg (US 6,895,588 B1) further in view of Chiles et al. (US 6,581,157 B1).

As to claim 9, Nishio does not teach wherein configuration of the network device further comprises updating device firmware to a newer firmware version packaged with the device driver. However, Chiles teaches wherein configuration of the device further comprises updating device firmware to a newer firmware version packaged with the device driver (col. 1, lines 51-63, col. 6, lines 59-64 and col. 7, lines 28-35). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to apply the teaching of Chiles to the system of Nishio because Chiles teaches a method for updating a memory image in a non-volatile programmable memory in a device, so the device can provide new features and functions (col. 3, lines 36-38 and col. 6, line 59-64).

As to claim 10, Nishio does not teach wherein configuration of the network device further comprises writing a copy of a most recent or current device driver package onto the network device. However, Chiles teaches wherein configuration of the network device further comprises writing a copy of a most recent or current device driver package (col. 6, lines 42-45 and col. 7, line 19-25). Although Chiles does not teach on the network device, Nishio teaches the driver can be maintained in the network device (A configurator 7 executes the installation of a driver obtained from the printer; col. 4, lines 3-4 and The driver URL can be a URL to the printer; col. 11, lines 12-19). It would have been obvious to one of ordinary skill the art, the drive package in the device would be updated to reflect the change of the device. See claim 9 above for reason to apply the teaching of Chiles to the system of Nishio.

5. Claims 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2) and Ruberg (US 6,895,588 B1) further in view of Meenan et al. (US 7,283,505 B1).

As to claim 53, Nishio does not teach the configuration component is further configured to associate the network device with at least one other network device at least by authenticating the network device with respect to the at least one other network device using a credential.

However, Meenan teaches associating the network device with the at least one other network device at least by authenticating the network device with respect to at least one other network device using a credential (col. 18, lines 14-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Meenan to the system of Nishio because Meenan teaches a method that allows only identified devices to be connected and operated in a secured network, thus, avoid problems from untrusted devices.

As to claim 54, see rejections of claims 1, 2 and 53.

6. Claims 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2) and Ruberg (US 6,895,588 B1) further in view of Kemp et al. (US 7,69,673 B2).

As to claim 55, Nishio does not explicitly teach the interface selectively include a representation of the network device by displaying a ghosted icon of the device when the output of the monitoring component indicates that the network device is not accessible to the computing device.

However, Kemp teaches a ghosted image of a device is displayed when the icon of the device is being drag and drop (col. 10, lines 48-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the concept display a ghosted image for a device that is not available to the system of Nishio because the method taught let the user know all the devices that can be used to the user even when the device is not connected to the network.

As to claim 56, Nishio teaches the interface displays representation of a set of network devices that have associated with the computing device (col. 8, lines 4-6).

7. **Claims 27, 29-32, 34, and 41-49 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Meenan et al. (US 7,283,505 B1).**

As to claim 27, Nishio teaches a method of configuring a network device on a network for use with at least one other network device installed on the network (col. 5, lines 24-26, and lines 39-46), wherein the network device is a computer peripheral (Printer PR; Fig. 1) and the at least one other network device comprises a computer (client PC; Fig. 1), the comprising:

associating the computer peripheral with the computer (a print setup window … a printer selection box; col. 5, lines 19-23 and lines 50-57);

locating a driver component associated with the computer peripheral (the application 1 searches a driver database managed by the client OS for a corresponding driver; col. 8, lines 11-13);

retrieving the driver component (inherent from "the application 1 installs the driver"; col. 8, lines 17-18 or obtaining the driver from a predetermined storage region of a storage device of a server on the network; col. 7, lines 30-35, and the system installer 1009 obtains the printer driver stored in the ... client PC; col. 9, lines 59-62); and

loading the driver component to facilitate installation of the computer peripheral (the application 1 installs the driver"; col. 8, lines 17-18 and installs the printer driver in the driver memory 1004; col. 9, lines 62-63).

Nishio does not teach receiving, though a user interface on the computer, information defining a credential, authenticating the computer peripheral with the computer using the credential, in response to authenticating the computer peripheral, storing information for re-authenticating the computer peripheral, detecting that the computer peripheral is not longer on the network, and using the stored information for re-authenticating the computer peripheral to automatically re-associated the computer peripheral with the computer when the computer peripheral is reconnected to the network. However, Meenan teaches receiving, though a user interface on the computer, information defining a credential (col.19, lines 29-30), associating the computer peripheral with the computer at least by authenticating the computer peripheral with the computer using the credential (col. 9, lines 17-65), in response to authenticating the computer peripheral, storing information for re-authenticating the computer peripheral (The client device may obtain authentication information … through the access of authentication information stored on the home network; col. 9, lines 26-33. Thus, the authentication information was entered by a user from previous time was stored/saved at the home network), detecting that the computer peripheral is no longer on the network (inherent from "the other devices, such as a laptop computer 112f and a PDA 112g ... wireless device"; col. 4, lines 11-15. Those devices do not connected to the home network all the time, the devices can be disconnected or power down. Thus, those time the network device is no longer on the network), and using the stored information for re-authenticating the computer peripheral to automatically re-associated the computer peripheral with the computer when the computer peripheral is reconnected to the network (The client device may obtain authentication information … through the access of authentication information stored on the home network; col. 9, lines 26-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Meenan to the system of Nishio because Meenan teaches a method that allows only identified devices to be connected and operated in a secured network, thus, avoid problems from untrusted devices.

As to claim 29, Nishio teaches wherein locating a driver component comprises searching a local data store of the computer (The application 1 searches a driver database … the application 1 installs the driver; col. 8, lines 11-18).

As to claim 30, Nishio teaches wherein locating a driver component comprises searching a remote server (Driver URL … a storage device of a server on the network; col. 7, lines 28-35 and the system installer 1009 obtains the printer driver stored in the external memory of the file server 1010; col. 9, lines 59-61).

As to claim 31, Nishio teaches wherein searching a remote server is accomplished over the Internet (inherent from Driver URL … a storage device of a server on the network; col. 7, lines 28-35).

As to claim 32, Nishio teaches wherein the driver component is retrieved from the computer peripheral (A configurator 7 executes the installation of a driver obtained from the printer; col. 4, lines 3-4 and The driver URL can be a URL to the printer; col. 11, lines 12-19).

As to claim 34, it is the same as the method claim of claim 27 except this is a computer readable medium claim, and is rejected under the same ground of rejection.

As to claim 41, Nishio does not teach wherein the credential is an identification string and authenticating comprises receiving the identification string through the user interface. However, Meenan teaches wherein the credential is an identification string and authenticating comprises receiving the identification string through a user interface (col.19, lines 29-30). See rejection of claim 27 for reason to apply the teaching of Meenan to the system of Nishio.

As to claim 42, Nishio does not teach the credential is a certificate-based credential and authenticating comprises employing the certificate-based credential. However, Meenan teaches the credential is a certificate-based credential and authenticating comprises employing the certificate-based credential (col. 19, lines 38-46). See rejection of claim 27 for reason to apply the teaching of Meenan to the system of Nishio.

As to claim 43, Nishio as modified by Meenan teaches establishing a secure, authenticated communications channel (see Meenan: col. 6, lines 31-41).

As to claim 44, Nishio as modified by Meenan teaches encrypting communications between the computer peripheral and the at least one other network device over the communications channels (see Meenan: col. 6, lines 44-57).

As to claim 45, Nishio teaches receiving metadata from the network device, wherein the metadata is used in locating the driver component associated with the computer peripheral (col. 7, lines 6-15 and lines 28-35).

As to claim 46, Nishio teaches detecting the computer peripheral on the network (col. 5, lines 50-53).

As to claim 47, Nishio teaches wherein detecting comprises searching for the identification string utilizing Simple Service Discovery Protocol (SSDP) (col. 5, lines 53-55).

As to claim 48, Nishio does not teach detecting comprises searching for the network device utilizing Web Services Discovery Protocol. However, Nishio teaches the search request is not limited to the SSDP search (col. 5, lines 53-55). It would have been obvious to one of ordinary skill in the art that different search technique, such as Web Service Discover Protocol can be utilized in the system of Nishio.

As to claim 49, Nishio does not teach detecting comprises passively receiving a notification from the computer peripheral that it is connected to the network. However, Meenan teaches detecting comprises passively receiving a notification from the network device that it is connected to the network (col. 19, lines 16-25). See rejection of claim 27 for reason to apply the teaching of Meenan to the system of Nishio.

As to claim 52, Nishio as modified by Meenan teaches storing the credential on a computer-storage medium (col. 19, lines 41-45, i.e., the security code must be stored in order to be retrieved and compared).

8. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Meenan et al. (US 7,283,505 B1) further in view of Chiles et al. (US 6,581,157 B1).

As to claim 50, see rejection of claim 9 above.

9. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Meenan et al. (US 7,283,505 B1) further in view of Howard et al. (US 6,823,526 B2).

As to claim 51, Nishio does not teach setting one or more registry keys with configuration information for the computer peripheral.

However, Howard teaches wherein configuration of the system further comprises setting one or more registry keys for the network device (The operating system … in the registry; col. 7, lines 13-24, col. 8, lines 5-26).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to apply the teaching of Howard to the system of Nishio because Howard teaches in details how the system installs a device driver to use with external device.

Response to Arguments

10. Applicant's arguments with respect to claims 1-4, 6-10, 53-56 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 6/16/2010 regarding claims 27, 29-32, 34, 41-52 and 54 have been fully considered but they are not persuasive. The rejection has been modified to show that Meenan teaches the credential is received through a user interface.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DIEM K CAO/
Primary Examiner
Art Unit 2194

DC
August 24, 2010